A.   Specification Paragraphs With Mark-ups to Show Changes Made

The following are mark-ups to show changes made to paragraph(s) starting at page 8, line 1, and ending at page 9, line 5:

Fig. 2 is a schematic block diagram that illustrates a first preferred embodiment of a system for controlling a packet data service in a mobile communication network in accordance with the present invention. With reference to Fig. 2, the packet data service control system includes a plurality of radio network controllers (RNCs) 31 and 32. Each of the RNCs 31 and 32 are adapted to assign a radio channel to a packet data service active one of a plurality of terminals 11-14 registered to a mobile switching center (MSC) and control a data service path for the active terminal. A plurality of base stations (e.g., BS1, BS2, ..., BS3) can be correspondingly coupled between the RNCs (e.g., 31, 32) or MSC and the terminals (e.g., 11-14). A packet data node (PDN) 61 is adapted to maintain a point-to-point protocol (PPP) link with the active terminal through a serving one of the RNCs 31 and 32 to process an incoming signal or an outgoing signal to or from the active terminal. A location management function (LMF) entity 41 is adapted to manage service state information and location information of the active terminal and connection information between the active terminal and the packet data node 61, which maintains the PPP link with the active terminal. A home location register (HLR) 51 is coupled to the location management function entity 41 for storing identifiers of all the terminals 11-14 registered to the mobile switching center (MSC) and managing registration information of the terminals 11-14.

The location management function entity 41 is provided in the same area of the packet data service control system together with the mobile switching center or a visitor location register (VLR). The LMF 41 can also be provided within the MSC or VLR. Alternatively, a packet control function (PCF) entity may be provided instead of the location management function entity 41. The packet control function entity is adapted to assign packet paths to radio packet data and establish a virtual circuit between the serving radio network controller and a target one of the radio network controllers 31 and 32 or between the serving radio network controller and the packet data node 61.

The following are mark-ups to show changes made to paragraph(s) starting at page 12, line 10, and ending at page 12, line 15:

Operations of the packet data service control system in accordance with the first preferred embodiment of the present invention will now be described with reference to Fig. 2. As shown in Fig. 2, when no data is transferred between each of the terminals 11-14 and each of the RNCs 31 and [33] 32, a traffic channel is released therebetween for the efficient use of radio resources by the network. Then, upon the occurrence of data to be transferred, the traffic channel is re-established between the terminal and RNC.

B.   Clean Specification Changes

Please replace the paragraph(s) starting at page 8, line 1, and ending at page 9, line 5:

Fig. 2 is a schematic block diagram that illustrates a first preferred embodiment of a system for controlling a packet data service in a mobile communication network in accordance with the present invention. With reference to Fig. 2, the packet data service control system includes a plurality of radio network controllers (RNCs) 31 and 32. Each of the RNCs 31 and 32 are adapted to assign a radio channel to a packet data service active one of a plurality of terminals 11-14 registered to a mobile switching center (MSC) and control a data service path for the active terminal. A plurality of base stations (e.g., BS1, BS2, ..., BS3) can be correspondingly coupled between the RNCs (e.g., 31, 32) or MSC and the terminals (e.g., 11-14). A packet data node (PDN) 61 is adapted to maintain a point-to-point protocol (PPP) link with the active terminal through a serving one of the RNCs 31 and 32 to process an incoming signal or an outgoing signal to or from the active terminal. A location management function (LMF) entity 41 is adapted to manage service state information and location information of the active terminal and connection information between the active terminal and the packet data node 61, which maintains the PPP link with the active terminal. A home location register (HLR) 51 is coupled to the location management function entity 41 for storing identifiers of all the terminals 11-14 registered to the mobile switching center (MSC) and managing registration information of the terminals 11-14.

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The location management function entity 41 is provided in the same area of the packet data service control system together with the mobile switching center or a visitor location register (VLR). The LMF 41 can also be provided within the MSC or VLR. Alternatively, a packet control function (PCF) entity may be provided instead of the location management function entity 41. The packet control function entity is adapted to assign packet paths to radio packet data and establish a virtual circuit between the serving radio network controller and a target one of the radio network controllers 31 and 32 or between the serving radio network controller and the packet data node 61.

Please replace paragraph(s) starting at page 12, line 10, and ending at page 12, line 15:

Operations of the packet data service control system in accordance with the first preferred embodiment of the present invention will now be described with reference to Fig. 2. As shown in Fig. 2, when no data is transferred between each of the terminals 11-14 and each of the RNCs 31 and 32, a traffic channel is released therebetween for the efficient use of radio resources by the network. Then, upon the occurrence of data to be transferred, the traffic channel is re-established between the terminal and RNC.